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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/919,642

07/31/2001

Richard Paul Ejzak

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02/17/2005

Lucent Technologies Inc.
Docket Administrator (Room 3J-219)
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER

JUNTIMA, NITTAYA

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,642

Applicant(s)

EJZAK, RICHARD PAUL

Examiner

Nittaya Juntima

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1, 5, 7, 9-10, and 12 are objected to because of the following informalities:
 - in claim 1, ll 4, "IP" should be spelled out to avoid any misinterpretation;
ll 9, "SIP" "IP" should be spelled out to avoid any misinterpretation;
ll 12, "S-CSCF" should be spelled out to avoid any misinterpretation;
 - in claim 5, ll 3, "I-CSCF" should be spelled out to avoid any misinterpretation;
 - in claim 7, ll 3, "MGCF" and "I-CSCF" should be spelled out to avoid any misinterpretation;
 - in claim 9, ll 3, "the" should be changed to "an;"
ll 3-4, "I-CSCF" should be spelled out to avoid any misinterpretation;
 - in claim 10, ll 3, "the" should be changed to "a" and "PLMN" should be spelled out to avoid any misinterpretation;
 - in claim 12, ll 4, "the I-CSCF" should be changed to "an I-CSCF" to avoid lack of antecedent basis, and "I-CSCF" should also be spelled out to avoid any misinterpretation.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 11, and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Rasanen et al. ("Rasanen") (US 2004/0028037 A1).

Regarding claim 1, as shown in Figs. 1 and 4, Rasanen teaches a method for terminating a call request (SIP INVITE) to a mobile unit (16), the method comprising:

Receiving a call (SIP INVITE) intended for the mobile unit (16) at the IMS (SIP INVITE is received at the CSCF 7 which must be located in an IMS, paragraphs 0048 and 0070).

Forwarding by the IMS the call intended for the mobile unit to the iMSC (MGCF 9) via SIP on an Mx interface (a connection between CSCF 7 and MGCF 9 as shown in Fig. 1) (SIP INVITE is routed from CSCF 7 to MGCF 9, paragraphs 0048 and 0070).

Sending by an S-CSCF located in the IMS SIP messages (SIP INVITE and SIP ACK messages) (since the method in Fig. 4 involves a mobile terminated communication, S-CSCF which is a function included in CSCF 7 must be involved in transmitting SIP INVITE and SIP ACK messages to MGCF 9, paragraphs 0048 and 0070).

Performing by the iMSC (MGCF 9) interworking between SIP call control procedures (SIP messages) on the Mx interface and call control procedures (ISUP messages) towards the mobile unit (16). See paragraphs 0048 and 0070.

Regarding claim 11, as shown in Figs. 1 and 4, Rasanen further teaches sending the SIP messages (SIP INVITE and SIP ACK messages) directly to the iMSC (MGCF 9). See paragraphs 0048 and 0070.

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Regarding claims 14-16, as shown in Fig. 4, Rasanen teaches mapping call states/messages/call control procedures between SIP (SIP messages, e.g. INVITE, 183 SESSION PROGRESS, ALERTING, 200 OK) and an over-the-air call control protocol (ISUP messages used to communicate with CS-MS 16, e.g. IAM, ACM, CPG/ALERTING, ANM). See paragraph 0070.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasanen et al. ("Rasanen") (US 2004/0028037 A1) in view of Barany et al. ("Barany") (US 2001/0043577 A1).

Regarding claims 2 and 6, Rasanen fails to teach receiving a call request from a PSTN/PLMN as recited in the claims.

However, as shown in Fig. 3, Barany teaches a system where a signaling path is connected from PSTN 302 to a CSCF 310B via T-SGW 344 and MGCF 318 which enables a call request originated in the PSTN 302 to be forwarded to the CSCF 310B.

Given the teaching of Barany and Rasanen teaching on receiving a call request (SIP INVITE) by the CSCF, paragraph 0070, it would have been obvious to one skilled in the art to modify the teaching of Rasanen to include receiving a call request from a PSTN/PLMN as

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recited in the claims. The suggestion/motivation to do so would have been to enable the terminating mobile unit (e.g. CS-MS 16 in Fig. 4, Rasanen) to communicate with a PSTN/PLMN user using a CSCF in the IMS using signaling services provided by CSCF.

Regarding claims 3 and 7, Rasanen fails to teach that the IMS receives the call request from the PSTN/PLMN via a MGCF, I-CSCF, and a S-CSCF.

However, as shown in Fig. 3, Barany teaches a system where a signaling path is connected from PSTN 302 to a CSCF 310B via T-SGW 344 and MGCF 318 which enables a call request originated in the PSTN 302 to be forwarded to the CSCF 310B, and that both S-CSCF and I-CSCF are involved in mobile terminated communication (paragraph 0112).

Given the teaching of Barany and Rasanen teaching on receiving a call request (SIP INVITE) by the CSCF, paragraph 0070, it would have been obvious to one skilled in the art to modify the teaching of Rasanen to include that the IMS receives the call request from the PSTN/PLMN via a MGCF, I-CSCF, and a S-CSCF as recited in claims. The suggestion/motivation to do so would have been to enable the terminating mobile unit (e.g. CS-MS 16 in Fig. 4, Rasanen) to communicate with a PSTN/PLMN user using a CSCF in the IMS using signaling services provided by CSCF.

Regarding claim 4, Rasanen fails to teach receiving a call request from a second IMS.

However, as shown in Fig. 3, Barany teaches a system where a signaling path is connected from a first IMS, e.g. where CSCF 310B is located, to a second IMS, e.g. where CSCF 310A is located.

Given the teaching of Barany and Rasanen teaching on receiving a call request (SIP INVITE) by the CSCF, paragraph 0070, it would have been obvious to one skilled in the art to

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modify the teaching of Rasanen to include receiving a call request from a second IMS as recited in the claim. The suggestion/motivation to do so would have been to enable the terminating mobile unit (e.g. CS-MS 16 in Fig. 4, Rasanen) to communicate with a second IMS user using signaling services provided by CSCF.

Regarding claim 5, Rasanen fails to teach that the IMS receives the call request from the second IMS via a MGCF, I-CSCF, and a S-CSCF.

However, as shown in Fig. 3, Barany teaches a system where a signaling path is connected from a first IMS, e.g. IMS where CSCF 310B is located, to a second IMS, e.g. another IMS where CSCF 310A is located, and that both S-CSCF and I-CSCF are involved in mobile terminated communication (paragraph 0112).

Given the teaching of Barany and Rasanen teaching on receiving a call request (SIP INVITE) by the CSCF, paragraph 0070, it would have been obvious to one skilled in the art to modify the teaching of Rasanen to include that the IMS receives the call request from the PSTN/PLMN via a MGCF, I-CSCF, and a S-CSCF as recited in claims. The suggestion/motivation to do so would have been to enable the terminating mobile unit (e.g. CS-MS 16 in Fig. 4, Rasanen) to communicate with a user of the second IMS using signaling services provided by CSCF.

Regarding claims 8 and 10, Rasanen fails to teach receiving a call request from a SIP endpoint located outside of a PLMN.

However, as shown in Fig. 3, Barany teaches a system where a signaling path is connected from a Multimedia IP network 304 to a CSCF 310B.

Given the teaching of Barany and Rasanen teaching on receiving a call request (SIP INVITE) by the CSCF, paragraph 0070, it would have been obvious to one skilled in the art to modify the teaching of Rasanen to include receiving a call request from a SIP endpoint located outside of a PLMN as recited in the claim. The suggestion/motivation to do so would have been to enable the terminating mobile unit (e.g. CS-MS 16 in Fig. 4, Rasanen) to communicate with a user at the SIP endpoint located outside of a PLMN using signaling services provided by CSCF.

Regarding claim 9, Rasanen fails to teach that the IMS receives the call request from the the SIP endpoint via an IP multimedia network, a MGCF, I-CSCF, and a S-CSCF.

However, as shown in Fig. 3, Barany teaches a system where a signaling path is connected from a Multimedia IP networks 304 to CSCF 310B, and that both S-CSCF and I-CSCF are involved in mobile terminated communication (paragraph 0112).

Given the teaching of Barany and Rasanen teaching on receiving a call request (SIP INVITE) by the CSCF, paragraph 0070, it would have been obvious to one skilled in the art to modify the teaching of Rasanen to include that the IMS receives the call request from the SIP endpoint via an IP multimedia network, a MGCF, I-CSCF, and a S-CSCF as recited in claims. The suggestion/motivation to do so would have been to enable the terminating mobile unit (e.g. CS-MS 16 in Fig. 4, Rasanen) to communicate with a user at the SIP endpoint using signaling services provided by CSCF.

Regarding claims 12 and 13, since Rasanen the method in Fig. 4 involves a mobile terminated communication, both S-CSCF and I-CSCF must be involved and used in transmitting SIP INVITE and SIP ACK messages to MGCF 9, paragraphs 0048 and 0070, and Fig. 1 illustrating a direct connection between CSCF (7) and iMSC (MGCF 9).

However, Rasanen does not explicitly teach sending the SIP messages to an I-CSCF which forwards the SIP messages to the iMSC.

Barany teaches that I-CSCF is used in determining how to route mobile terminated call (paragraph 0112).

Given the teaching of Barany, it would have been obvious to one skilled in the art to modify the teaching of Rasanen to include sending the SIP messages to an I-CSCF which forwards the SIP messages to the iMSC as recited in the claim. The suggestion/motivation to do so would have been to route the SIP messages to a terminating mobile.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Westman (US 2004/0184435 A1), disclosing method for providing call forwarding from IMS to CS network in dual subscription mode (Fig. 1).
- Tuohino et al. (US 2002/0196775 A1), disclosing routing a call between IMS and CS Network (Figs. 2 and 3).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima
February 11, 2005
NJ

Ricky Ngo 2/15/05
RICKY NGO
PRIMARY EXAMINER